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Development of web GIS tool for interactive examination of climate data and provision of climate services

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Web GIS platform was developed in order to enable easy access to past climate data and future climate change projections. Platform is designed having in mind different sectors (agriculture, forestry and water management at first place) which are interested in climate data. Available climate products include 30 year derived seasonal temperature and precipitation, as well as specialised indices, such as Ellenberg climate quotient and Forest aridity index, important for forestry. Open source software tools were used for the project. Drupal was used as the base for the website, GeoServer for map storage and java script Leaflet for presentation of maps. All maps are divided into groups while each has several maps chronologically sorted (from past observed data to future scenarios). Climate data sources were EOBS database (observed climate) and EBUPOM model (future projections). Each map group can be fast reviewed with so called slider menu. User can look for particular location using search option, adjust opacity of maps and set background layer (particularly Google Earth or Bing maps). After switching on info option, each pixel value of any available map can be checked by simple clicking at location. Besides relatively simple map review, refined options such as making more advanced graphs (climate diagrams, etc.) and usage of user defined shape files in calculations are under preparation. Long-term intention of the platform is to help different sectors in decision making by improving quality of their decisions in the segment related to climate by providing climate related services. Platform is available at web address www.sectorclim.com.